

Sally

Sage-Grouse

Explores Idaho



U.S. Department of the Interior
Bureau of Land Management

BLM Idaho Junior Explorers



Your journey will acquaint you with a very important bird and take you to some of the most beautiful and unusual places in Idaho!



Can you find all 20 places where Sally appears in this booklet? Look hard—she gets around!

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Public Lands Belong to You!

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Photo by Mark Coontz

The Bureau of Land Management (BLM) works to make sure that the nation's public lands are healthy for everyone to enjoy! In Idaho, that means managing nearly 12 million acres. That's nearly one-fourth of the total land in the state.

Public lands are places to play and explore! You can hike, camp, and fish and do many other fun things. You can also go geocaching, a kind of high-tech treasure hunt for hidden containers. You can even find and follow the routes traveled by the pioneers, or learn about lands used and cherished by Native Americans.

Public lands are special because they fulfill so many needs. They provide wonderful opportunities for recreation. They also provide a place with the food, water, and shelter that many plant and animal species need to live, or *habitat*. They offer grazing for cattle, sheep, and horses. And they contain minerals that people need for building (stone and gravel), for energy power (oil, coal, and geothermal steam), and for other uses (copper, silver, and gold).

Junior Explorers

The BLM's Junior Explorer program helps introduce young explorers like you to the lands and resources that the BLM manages. In this Junior Explorer booklet you will meet Sally, a most unusual bird that lives on the ground instead of in the trees. Sally will teach you all about being a sage-grouse. Then she'll fly you to a beautiful and secluded wilderness, above scenic rivers and deep valleys as she journeys to find food and shelter.

To earn a Junior Explorer badge and certificate, complete at least five of the activities in this booklet. You can check your answers in the Answer Key on page 27. Then mail or bring your signed pledge (page 23) to the BLM Idaho State Office at 1387 S. Vinnell Way, Boise, ID 83709—your gateway to fun on Idaho's public lands!

Male and Female Sage-Grouse



Photo by Kim Toulouse

My sage-grouse friends and I are large, roundish birds about the size of a very big chicken or pheasant. Males are especially recognizable by their beautiful feathers, or *plumage* [PLOOM-ij].



Male Sage-Grouse

Photo by Kim Toulouse

filoplumes

eye comb

beak

tail feather

throat patch

wing

air sac



Female Sage-Grouse

Photo by Kim Toulouse

Learn What They Look Like



Directions: Color the male sage-grouse to look like the one in the photo opposite.

Chicks

My chicks will hatch in a nest on the ground. The best place for me to build a nest is underneath sagebrush. Doing so helps me hide my eggs from *predators* (animals that must eat, or prey on, other animals to live), such as coyotes, badgers, weasels, and eagles. Tall grass is also great for hiding my nest—and me, too!

I lay about seven to nine eggs. They are usually olive-colored or greenish-white with brown dots. Around day 25, my little chicks start hatching. Each one has an *egg tooth*, a temporary tip on its bill that helps it break through the hard shell of the egg. After several days, my family of chicks (*brood*) is complete!



Photo by Terry Spivey, U.S. Forest Service

Did You Know?

My chicks can walk right away! They hatch from their eggs covered in feathers, with their eyes open, so they can run from predators if necessary. Because of this, scientists call them *precocial* [pre-CO-shul], but I just call them cute. Has anyone ever called you *precocious* [pre-CO-shus]? Well, if so, I guess you're just advanced for your age, too!



BADGER



WEASEL



GOLDEN EAGLE

Photo by Dennis Garrison, U.S. Forest Service

Photo by Bob Wick



Build a Nest

5



Photo provided by U.S. Department of Agriculture

Directions: Find the two chicks in the nest pictured above, and draw a line around them.



Directions: Circle the things that you would use to help Sally build a nest.



Photo by Bob Wick

With each season, my sage-grouse friends and I must travel to different places—or join in a *migration*—to breed and raise our young and to find food and shelter.

In early spring, the days are getting longer. The snow has melted and the smell of fresh grass is everywhere! Sagebrush leaves fill the air with their powerful, spicy odor. If you stop and listen, you can hear the clear, flute-like songs of the meadowlarks as the birds call to one another from the tops of sagebrush branches.

My sage-grouse friends and I have gathered around open areas on the range, or *leks*. Here, on these grassy dance floors, the males “display” by taking a few steps forward and fanning their tail feathers. They keep their neck feathers—called *filoplumes* [FIL-a-PLOOMS]—and eye combs upright. They do all this to attract females. At the same time, they make a spectacular show of inflating yellow air sacs in their chests. This makes a “plopping” sound that is unlike anything else you’ve ever heard!

After my female sage-grouse friends and I choose a mate, we make our nests in the safety of the sagebrush. Usually our nests are within a few miles of the lek. Later, our newborn chicks will be hungry. We will watch protectively over them as they fill up on ants and beetles. I will call to mine constantly and listen for their different voices calling back.

FUN FACT!



Native Americans have always been very aware of nature and how humans need to live in harmony with the natural world. Some Native American tribes perform dances and wear traditional clothing, called *regalia* [re-GAIL-ya], to imitate the colorful displays and unique strutting of the male sage-grouse on the lek.

Dance on a Lek

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You can watch and listen to a video of sage-grouse dancing on a lek here:
http://www.youtube.com/watch?v=ov9_72xLeF0



Want to get into the action and move, too? Play this hopscotch game with friends or by yourself!

Directions: Mark this hopscotch pattern on the ground using chalk or masking tape.

Stand behind square 1 and toss your marker—something like a stone or button—into it. Hop through the numbered course on one foot. Skip any squares with a marker in them. If you land in the DISPLAY square, you can stand on both feet. Then make a “Y” in the air with your arms to pretend you are a sage-grouse fanning your tail.

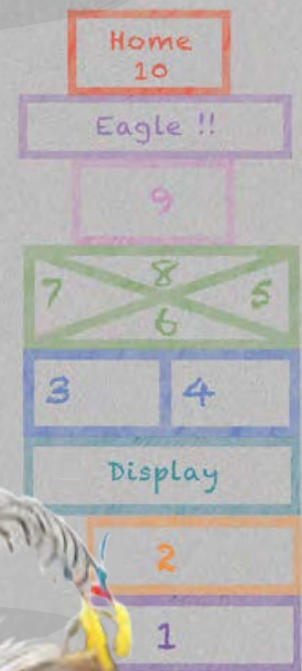
Continue hopping toward square 10, but watch out for the Eagle!! square. If you land inside it, an eagle will swoop down and take you off the lek, and your turn is over! Skip over it!

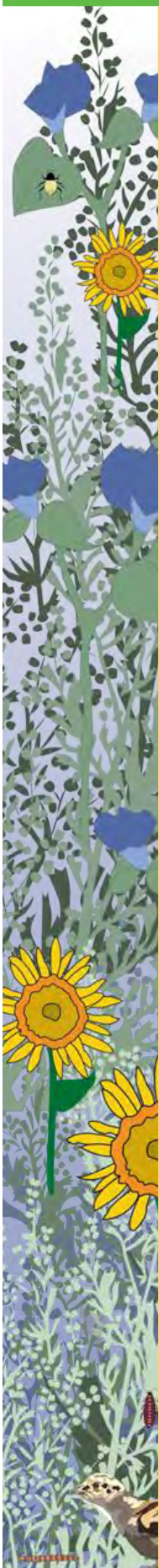
In square 10 you are safe; turn around, and hop back again. Toss your marker into square 2, and repeat the pattern. The first person to complete one course for every numbered square wins!

Your Turn Is Over When: You step on a line; you miss a numbered square; you go into a square where there is a marker; you put two feet down in a single box; or you land in the Eagle!! square. When your turn is over, you must leave your marker where you last left off.

Check here if you watched the video _____

Check here if you played hopscotch _____





FUN FACT!

We prefer to walk slowly, moving this way and that, about a half mile or so a day. But we can fly really fast, too. Almost 50 miles per hour!

Directions: Use your pencil to follow Sally and her chicks through the maze to find tasty insects, plants, and flowers.

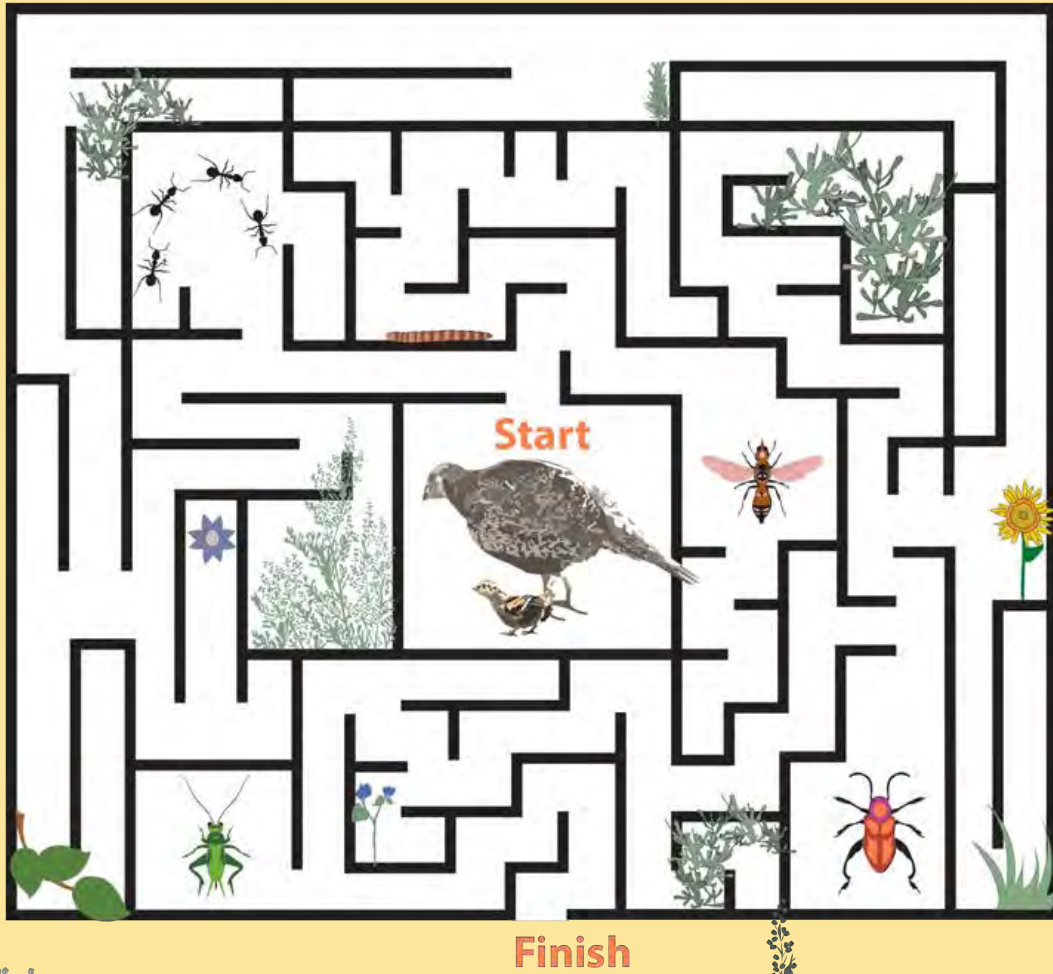




Photo by Bob Wick

Fall is here, the air is crisp, and the days are getting shorter. My sage-grouse friends and I search for food under or near the protective cover of sagebrush. We will move slowly toward our winter home. Because we blend in with this landscape, it is harder for predators to see and catch us. On the ground, we are stalked by coyotes, foxes, and even bobcats. Every day we watch and listen for golden eagles and hawks above our heads, too. We hide from them underneath the grass and sagebrush, quietly sitting still until they pass by.

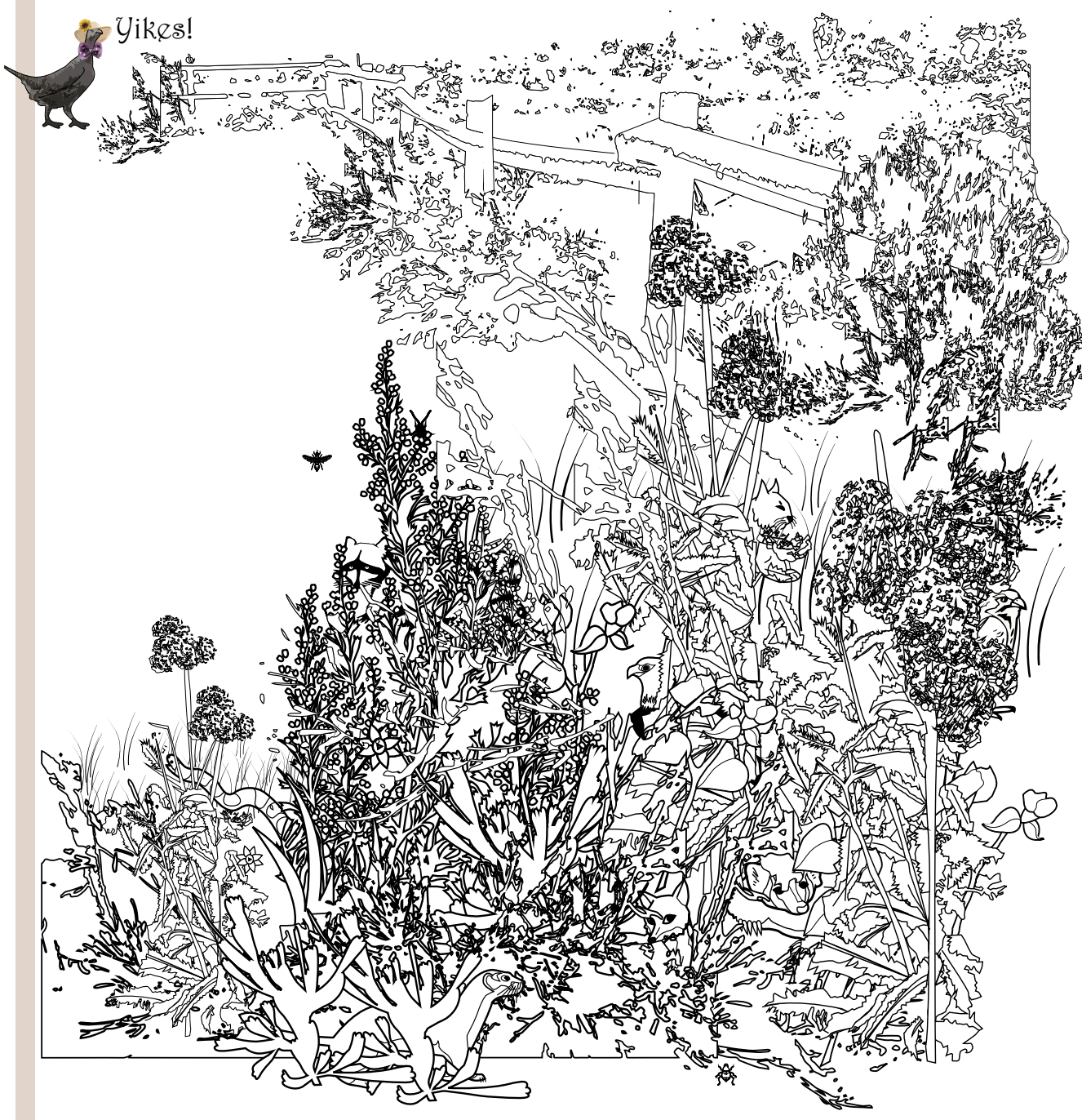


Photo by Bob Wick

Photo by Bob Wick

Stay Safe from Predators

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Animal drawings contributed by the U.S. Department of Agriculture

Directions: Find these predators hiding in the landscape: Raccoon, fox, weasel, coyote, snake, prairie falcon, bald eagle, bobcat, and badger.



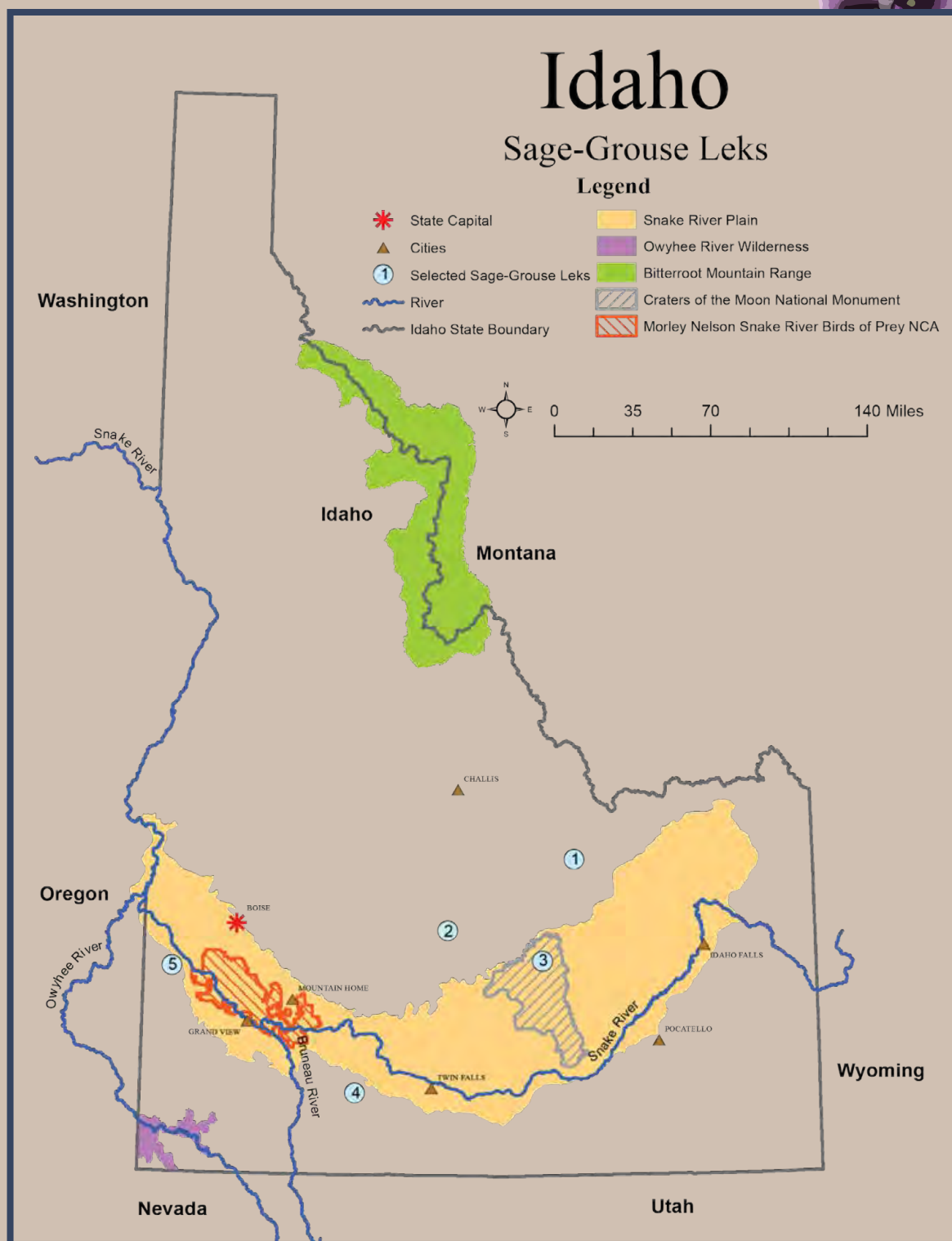
If you color the scene pictured above, too, that counts as two activities!



The winter wind whips across the rangeland, burying everything under a white blanket of snow. We search the land for green leaves of sagebrush poking out from the snow. Sagebrush is the **ONLY** thing we eat all winter, so we must find it to survive these cold winter days.

Directions: Now you understand what it means to be a sage-grouse, what we need to live, and why we migrate. The map opposite shows some places we go in Idaho to find food and shelter. Use the map and the map's Legend to answer these questions.

1. Sagebrush rangeland is plentiful near the state capital. What is the name of Idaho's capital city? _____
2. Leks need to be at least 2–3 miles away from developments and cities. What town is closest to Lek 4? How many miles away is the town from the lek? (Round up to the nearest "5.") _____; _____
3. What is the large plain that runs through most of southern Idaho? _____
4. What national monument would sage-grouse enter when migrating south from Lek 1 to Lek 3? _____
5. Meriwether Lewis introduced the sage-grouse to science in 1805. He first saw these birds when exploring parts of the then-unknown West with William Clarke. What mountain range did Lewis and Clark have to cross when entering Idaho from Montana? _____
6. Parts of the Owyhee [o-WHY-hee] River Wilderness provide abundant food and shelter, as well as leks, for sage-grouse. Name the river that flows directly east of that wilderness. _____
7. Some sage-grouse in Idaho have migrated as far as 40 miles or more between their summer and winter range! If a sage-grouse migrated from Lek 2 to Lek 3—about 40 miles—and traveled 2 miles each day, how many days would the trip take? _____



DID YOU KNOW?

Sage-grouse are the only animals that can survive solely on sagebrush leaves. Antelope and other rangeland animals must eat other plants, too.

Morley Nelson and Snake River Canyon



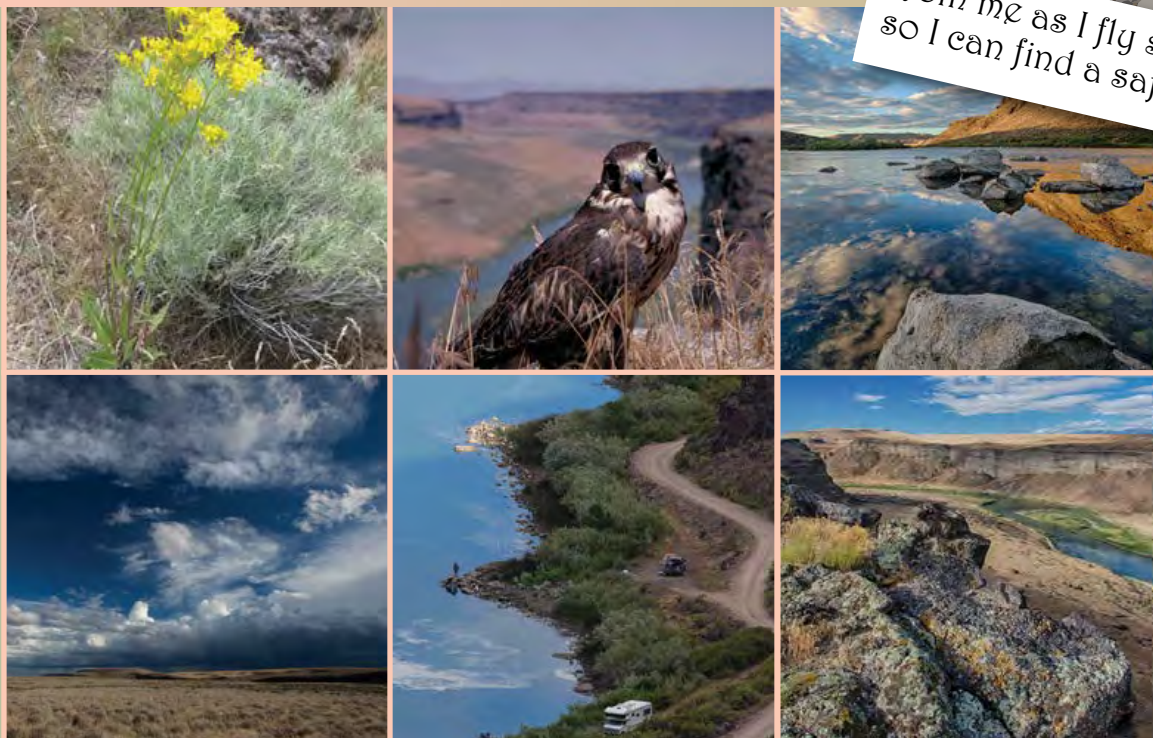
Now, let's do some exploring together. I know some fun places you can visit with your family and friends in the beautiful state of Idaho!

Our first stop is the Morley Nelson Snake River Birds of Prey National Conservation Area. (That's a lot of words, isn't it?) Here, the Snake River slowly carved a deep, narrow valley, or *canyon*, over thousands of years. More birds of prey nest and live here than at any other place in North America! Just think—you could be one of those people at Dedication Point. Imagine looking through binoculars or a camera at the soaring golden eagles, hawks, and falcons! But I'm not going to stay long. Do you know why? Because some of these birds can easily eat me!

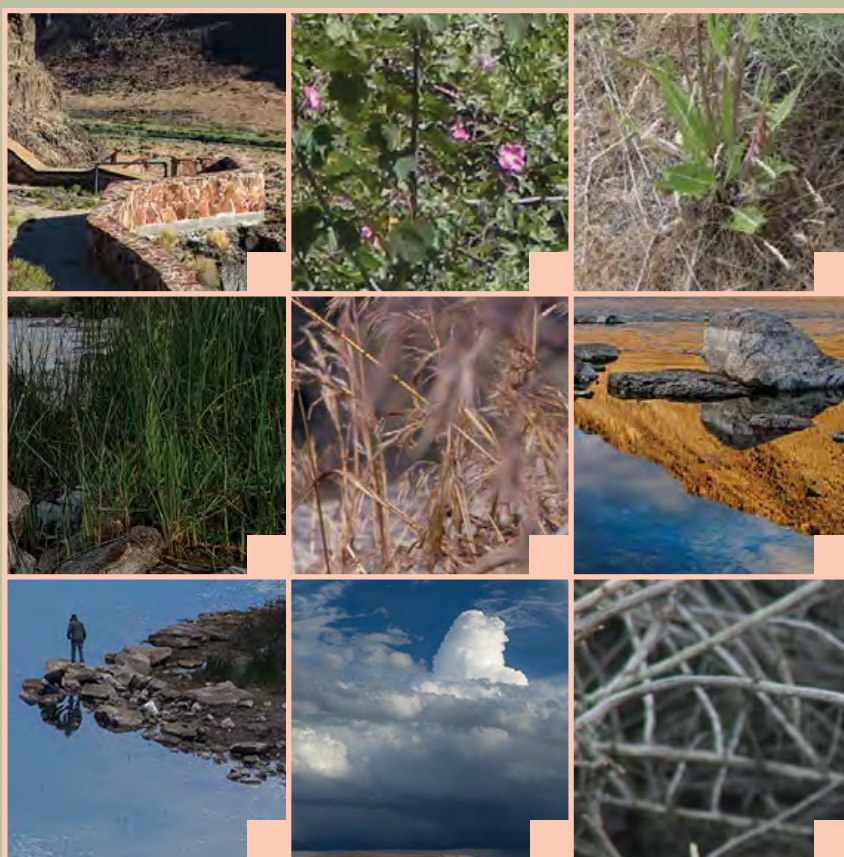
DID YOU KNOW?


Sage-grouse once lived in the Birds of Prey area, but wildfires burned most of the sagebrush. An *invasive weed* called cheatgrass then spread across the land. Cheatgrass is not a native plant; it is from another country. Cheatgrass offers no food or shelter for sage-grouse. Areas taken over by cheatgrass have less sagebrush and are more likely to catch fire and burn.

"Join me as I fly south from here, so I can find a safe place to live!"



Directions: Look at the six photos above. What do you see? These pictures show some of the beautiful places in Sally's world. Then look at the photos below on the Bingo board. Some of them contain small pieces of the six photos above; some do not. Try to find these small pieces within the six photos above. When you find a match, check (✓) the box on the Bingo board next to the photo. You're done when you get three in a row—that's Bingo!





Here we are at one of my favorite places—the Owyhee River Wilderness! This is a quiet and magical place. The sagebrush-covered plains drop off suddenly into steep canyons carved by the rivers far below. For millions of years, the Owyhee River and the weather have worn away the volcanic rock and soil of the cliffs. What remains are unusually shaped rock columns called *hoodoos*.

My sage-grouse friends and I stay out of the canyon to avoid predators. Up here on the plains we have a wonderful place to choose a mate and raise a family among the sagebrush.

Fun Fact!

The Owyhee River Wilderness is so rugged and remote that I love the solitude it provides. There are few roads or trails—which is one reason why this place is called a *wilderness*. But people can enjoy the scenery and wildlife, too, by floating the rivers in canoes and rafts. Be warned, though! The slow-moving river can quickly slide into a wild burst of water. I can see rafts bumping up against boulders, and water splashing and soaking the people inside. Humans must be very skilled rafters to travel here!



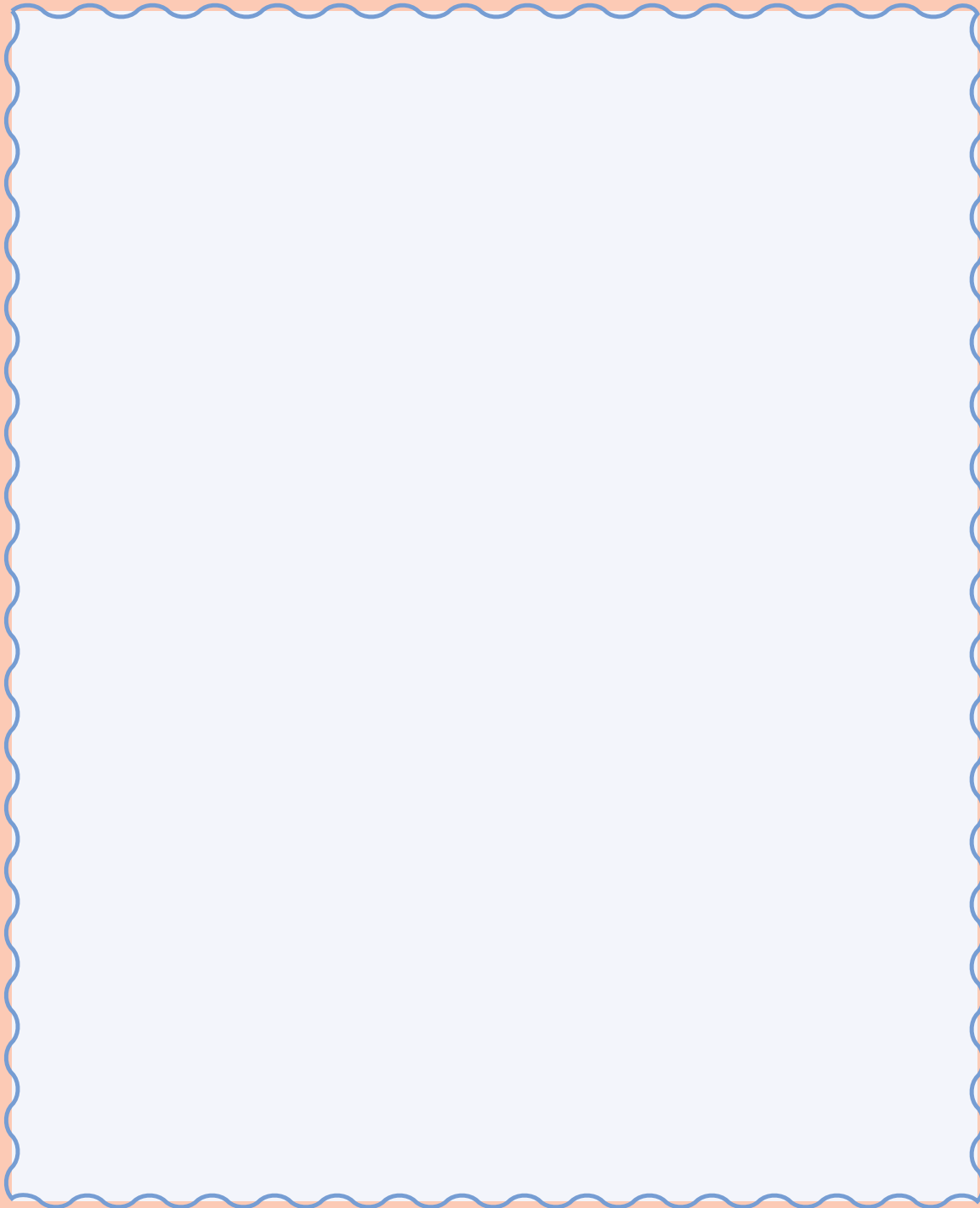
Float the River



17

Hoodoos look like stone giants guarding the river. They stand tall, like people. If you look hard enough, a part of the rock may jut out like a nose or chin, or a pair of folded hands. Cracks and lines can turn the rock face into a puzzled smile or a winked greeting.

Directions: Use your imagination, and draw some hoodoo “rock people” of your own.



Bruneau Overlook and Bruneau River



Can you believe that there is so much wilderness in Idaho? Fly with me to the Bruneau Canyon Overlook for a wonderful view of the Bruneau Wild and Scenic River. This huge desert gorge on the Bruneau River is 1,300 feet wide, 800 feet deep, and 60 miles long! The sagebrush growing on the flat areas above the canyon feeds sage-grouse all year long. Other animals like to come here and eat, too. Bighorn sheep and antelope are some.



Photo by Bob Wick



Photo by Bob Wick



Photo by Bob Wick

Experience the Wilderness

Write a poem about Sally’s journey. Try this! Write a poem about Sally’s journey...

- Line 1: Something Sally has seen or heard
- Line 2: How it looks or sounds
- Line 3: What it does
- Line 4: Something Sally might say about it

Example:	Your Poem
Sagebrush,	
Tall and green,	
Casting shadows,	
Welcome shade!	



Photo by Bob Wick

A Career in Wildlife

Name: Bruce Schoeberl

Years with the BLM: 5

Education: Degrees in Fisheries and Wildlife Biology and in General Biology

"I feel like I am the voice for wildlife in my area. Animals can't tell us DIRECTLY what they need. But there's a lot we can learn INDIRECTLY by observing them. And then we can help those most in need of protection."

Bruce travels to leks by helicopter to count sage-grouse during the mating period. His team also looks for sage-grouse at night. They play loud music to cover the sound of their footsteps, and then shine a bright light to distract the birds they find. After catching a bird with a fishing net, Bruce attaches a transmitter to the bird's body. Information gathered this way tells the BLM key things—including which areas to protect as most important to the sage-grouse for food, water, and nest cover.

Other than helping wildlife, what's the best part of the job? "Getting out into the field and not knowing what I might see," Bruce says. "A bobcat could run across the road in front of me. Or a golden eagle could suddenly swoop down from the sky. Or I might stumble across a beautiful, but angry, rattlesnake!"

We asked Bruce if being a Wildlife Biologist could be DANGEROUS. He told us about an assignment he once had helping giant tortoises [TOR-tus-ez] (turtles) on an island in the Indian Ocean. While traveling around the island, his boat capsized! He spent 4 hours in a shark-infested lagoon before reaching land and being rescued. So ... you decide!



Name: Jeremy Bisson

Years with the BLM: 7

Education: Degrees in Wildlife Management and Zoology; GIS (Geographic Information System) training

"I feel really lucky to get to do this work. I find it rewarding and meaningful."

Jeremy works to conserve the habitat of the sage-grouse. He measures the height of plants and the amount of plant cover in an area. Then he creates maps that show this information. The BLM uses these maps to ensure that sage-grouse habitat is not harmed by human activities on the land.

Jeremy especially enjoys helping to restore sage-grouse habitat. "I have the most fun being in the field, in the habitat, and enjoying all that nature has to offer," he says. One restoration project Jeremy planned extended across 38,000 acres—an area roughly the size of a small city, such as Grand View, Idaho. That project must have been AWESOME fun!



We Need Your Help!



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My sage-grouse friends and I really need your help. We are losing many of the places where we have always lived. Wildfire, invasive weeds, and some human impacts—such as power lines, oil and gas wells, and mining—are changing our habitat. Read more to see what you can do to help save me and my sage-grouse friends!



What You Can Do



Prevent wildfires! Lightning causes many wildfires, but wildfires started by people have also burned acres and acres of sagebrush. You can help preserve this plant that we need to survive by being careful with anything that may cause a fire. **DO NOT** use matches, lighters, or anything with a flame without an adult's supervision!

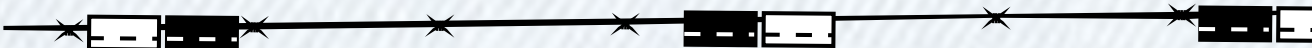


Volunteer! You can help the BLM put markers on fences so that we sage-grouse can see them better and not run into them and injure ourselves. You can also help the BLM plant sagebrush and other plants after wildfires have burned our food supply. For more information, please visit www.id.blm.gov.



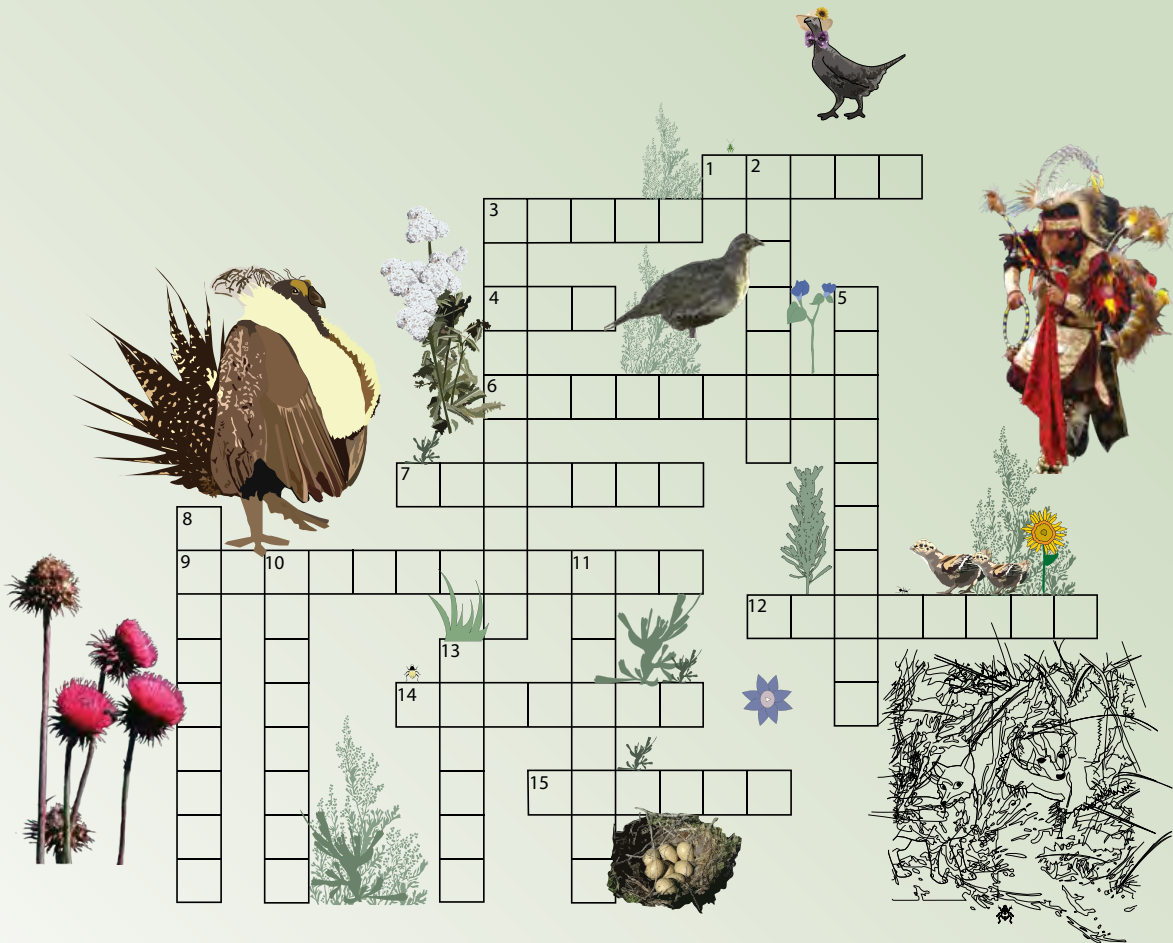
Learn more! Discover more about us and our habitat at www.id.blm.gov. And tell others about us, too!

People at the BLM are working hard to save me and my friends. They are finding ways to keep sagebrush habitat from being destroyed, while respecting the desires of people to use public lands for recreation, livestock grazing, scientific study, and other purposes.



Glossary Crossword

Directions: The crossword puzzle below was built using the words you have learned in this booklet. Complete it to make your own Glossary!



Across:

1. Group of chicks in one family.
4. Open area near sagebrush used for mating displays.
6. A word describing birds that hatch from their eggs covered in feathers, with their eyes open, and able to move around.
7. Covering of feathers on a bird.
9. A plant that is not native where it is growing, and that takes over or prevents native plants from growing.
12. An animal that eats other animals to survive.
14. A place that provides the food, water, and shelter that an animal or plant needs to live.
15. A strange rock formation created when a river or the weather wears away volcanic rock.

Down:

2. Objects and clothing used and worn by many Native American tribes when they are practicing their traditional dances on formal occasions.
3. Specialized neck feathers of the male sage-grouse.
5. An undeveloped, natural, and often remote place.
8. Seasonal movement of birds (and other animals) to find food and shelter.
10. Relating to or originating from a volcano.
11. Temporary tip on a chick's bill that allows the chick to break the hard shell of the egg and hatch.
13. A deep, narrow valley with steep sides, which often has a stream flowing through it.

Junior Explorer Pledge

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Bureau of Land Management Junior Explorer



As a Bureau of Land Management Junior Explorer, I promise to:

- do all I can to help preserve and protect the natural and cultural resources on our public lands,
- be aware of how my actions can affect other living things and the evidence of our past,
- keep learning about the importance of nature and our heritage, and
- share what I have learned with others!

Explorer Signature

Date



Look Up!



Photo by Terry L. Spivey, Terry L. Spivey Photography, Bugwood.org

Out here in the wilderness, the stars are so bright, as if you could reach out and grab them! There is a Native American legend about one very bright star—the North Star—that I would like to share with you:

Long, long ago, there was a brave mountain sheep named Na-gah. He was both daring and sure-footed. Na-gah was very good at climbing tall mountains, but one day, he found a mountain he could not climb. It was so tall that he could not see the top! He tried for days to climb it, but the mountain's sheer, steep cliffs offered no foothold for him to climb up.

So Na-gah crept inside the mountain and found a dark cave that led upwards. With much effort, he climbed through the darkness. Rocks rolled out from under him, until finally the cave collapsed behind him with a big "BOOM!" Na-gah kept climbing, out of the darkness, into the light, where he could gaze in wonder at the breathtaking height and beauty of his tiny foothold in the sky. He was forever trapped on top of this tallest mountain, but he had climbed his mountain and he was happy!

Na-gah's father searched for him all over the world and finally, he heard Na-gah calling back to him. Na-gah's father became sorrowful when he realized that his son could never descend from the top of the tallest mountain. He said, "I will save my son from death by turning him into a star. He will shine there for everyone to see, for all time. He shall guide all living things on the Earth and in the sky."

From that day on, Na-gah became a bright star visible to every living creature on Earth. He is the only star in the entire sky that is always in the same place, standing still. For centuries, travelers have relied on him to find their way. He is called the "Fixed Star" or the "North Star." Other sheep known as the "Big Dipper" and "Little Dipper"—now also stars—circle round and round him, looking for the way up to that magnificent place in the sky!

Be Kind to Nature



Visiting your public lands is one of the best ways to learn about nature and the amazing animals that live in Idaho. Read the outdoor tips below to learn how to visit safely while respecting the land and the animals that live here.

If you see a wild animal, stay quiet and watch it from a distance. If you see or have any trash, pack it out with you and throw it away at home. Trash ruins the beauty of our public lands and can hurt wildlife.



Explore the Outdoors Safely

Before taking off on any public lands adventure, take a full bottle of water with you. Your adventure may be hot and dry, and many wilderness areas do not have drinking water for people. Bring a snack, too, as well as a hat, jacket, and (depending on the season) sunscreen. Watch your footing. Rocky trails are common in Sally Sage-Grouse's world—and so are rattlesnakes!

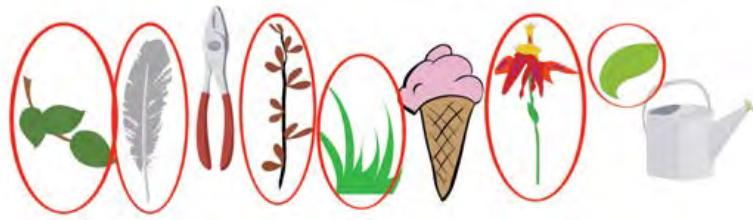
Use the Quick Response Code shown here to visit the BLM Idaho website and learn more fun facts about Idaho's special places. You can see other Junior Explorer activity books on this website, too!



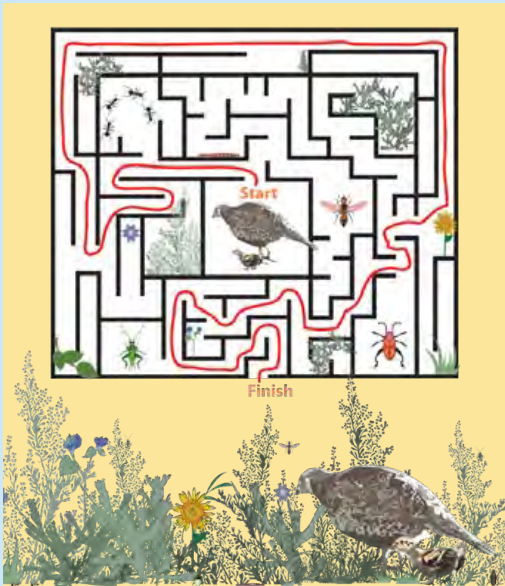
Answer Key



27



Page 5, Find the Chicks (left); Build a Nest (above)



Page 9, Search for Food

Page 12, Read a Map Before You Migrate

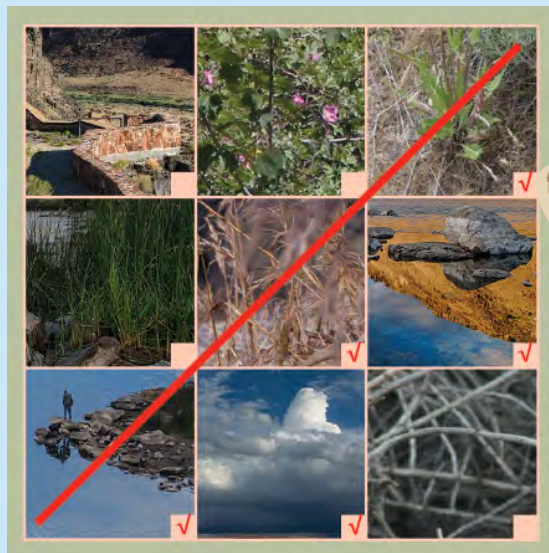


Page 11, Stay Safe from Predators

1. Boise; 2. Twin Falls, 35 miles;
3. Snake River Plain; 4. Craters of the Moon National Monument;
5. Bitterroot Mountain Range;
6. Bruneau River; 7. 20 days



Page 22, Glossary Crossword



Page 15, Take Time To Discover What's in the Photos

Bye!





Photo by Derek Oyen (<http://www.flickr.com/photos/33752469@N00>)

Directions: Copy the opposite page showing the jigsaw puzzle. Don't cut out the pieces yet! Glue or paste the page on a piece of cardboard, and let it dry. Now ask an adult to cut out the jigsaw puzzle pieces. Have fun fitting the pieces together to make this picture of a female sage-grouse!

You can use the photo on this page to help you figure out what piece goes where. When you're finished, store the jigsaw in a box or bag for the next time you want to play!



